



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/745,280	12/20/2000	Monica Joshi	CISCO-2828	7727

7590 04/22/2004
David B. Ritchie
D'Alessandro & Ritchie
P.O. Box 640640
San Jose, CA 95164-0640

EXAMINER

SEFCHECK, GREGORY B

ART UNIT	PAPER NUMBER
----------	--------------

2662

DATE MAILED: 04/22/2004

6

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/745,280

Applicant(s)

JOSHI ET AL.

Examiner

Gregory B Sefcheck

Art Unit

2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 December 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892).
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4.5.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a) because they fail to show the details of Fig. 1. The elements of the switch 12 are not arranged in such a manner that shows how the packet is received, processed, and transmitted from an ingress port to an egress port.

Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Ross (US005394402A).

- In regards to Claims 1, 8, 13, 20, and 27,

Ross discloses an apparatus and software-controlled program for executing a method for switching segmented LAN traffic (Title; Abstract; Col. 2, line 57; claim 1/8/9/13/20/27 – apparatus and stored program of instructions for executing a method for isolating ports on layer 2 switch).

Referring to Fig. 1, Ross discloses configuring and maintaining VLAN designations on the plurality of ports of hub 10, thereby isolating the ports for processing only messages belonging to the designated VLAN (Col. 3, lines 14-21; claim 1/8/9/13/20/27 – means for configuring/maintaining each switch port as protected or non-protected).

Ross shows identifying destination addresses carried by messages received on one of the hub's ports and transmitting/forwarding the message to a port that matches the destination address in memory (Col. 3-4, lines 65-6; claim 1/8/9/13/20/27 – means for matching destination address on a packet received by an ingress port with a physical address/port pair in switch memory).

Ross discloses how FPE 40 functions to interact with various control and memory elements for mapping message transmissions to/from the plurality of ports 12-18 of hub 10 (Col. 5-6, lines 29-45; claim 1/8/9/13/20/27 – means for generating forwarding map for packet based on destination address on packet; claim 1/8/13/20/27 – means for sending packet to ports pursuant to forwarding map;

- In regards to Claims 2-5, 7, 9-12, 14-17, 19, 21-24, and 26,

Ross discloses an apparatus and software-controlled program for executing a method for switching segmented LAN traffic that covers all limitations of the parent claims. Regarding the transmission of messages, Ross discloses that messages properly matched to stored VLAN designations and destination addresses of a port are transmitted/forwarded to that port (Col. 6, lines 24-33; claim 9 – packet forwarded to destination port if paired).

Ross shows that transmission from external ports which may connect the destination is performed for messages from an internal source port having an associated VLAN designation when the destination addresses do not match a stored address/designation of any other port of the hub (Col. 4, lines 11-17; claim 9 – packet forwarded to each non-protected port if ingress is protected; claim 2/14/21 – generating comprises sending packet to each of non-protected ports if destination address is not matched with physical address and ingress port is a protected port; claim 4/11/16/23 – generating comprises allowing packet to be forwarded from protected ports to each of non-protected ports).

Messages from an internal source port not having a VLAN designation may be transmitted to all ports (Col. 1, lines 28-31; claim 9 – packet forwarded to all ports if ingress is non-protected; claim 3/15/22 – generating comprises sending packet to all ports if destination address not matched with physical address and ingress port is non-

protected port; claim 5/10/17/24 – generating comprises allowing packet to be forwarded between non-protected ports; claim 7/12/19/26 – generating comprises allowing packet to be forwarded between non-protected port to each of protected ports).

- In regards to Claims 6, 18, and 25,

Ross discloses an apparatus and software-controlled program for executing a method for switching segmented LAN traffic that covers all limitations of the parent claims.

Ross shows that messages carrying a VLAN designation can not be forwarded to ports having a non-matching VLAN designation (Col. 3, lines 40-45; claim 6/18/25 – generating comprises prohibiting packet to be forwarded between each of protected ports).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Banks et al. (US 20020110125A1) discloses a method and system for creating and implementing zones in hardware within a fibre channel system

- Bannai et al. (US006647428B1) discloses an architecture for transport of multiple services in connectionless packet-based communication networks
- Bragg (US006587469B1) discloses a telecommunications system
- Vasa (US006308218B1) discloses an address look-up mechanism in a multi-port bridge for a local area network
- Diamant et al. (US005969632A) discloses an information security method and apparatus
- Baehr et al. (US005884025A) discloses a system for packet filtering of data packets at a computer interface
- Baehr et al. (US005878231A) discloses a system for packet filtering of data packets at a computer interface
- Edsall (US005764636A) discloses color blocking logic mechanism for a high-performance network switch
- Hunter et al. (US005666292A) discloses an external interface unit having message routing and protocol conversion
- Williams (US005559883A) discloses a method and apparatus for secure data packet bus communication
- Fenner (US005095480A) discloses a message routing system for shared communication media networks
- Lidinsky et al. (US004922486A) discloses a user to network interface protocol for packet communications networks

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory B Sefcheck whose telephone number is 703-305-0633. The examiner can normally be reached on 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 703-305-4744. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GBS
4-14-2004



HASSAN KIZOU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600